

Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

Forest Management and Productivity

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

Management Concerns

EROSION HAZARD - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

EQUIPMENT LIMITATION - A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

SEEDLING MORTALITY - The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

WINDTHROW HAZARD - A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

PLANT COMPETITION - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

POTENTIAL PRODUCTIVITY - This is discussed under the ordination class symbol.

COMMON TREES - Trees that generally occur on the soil are listed regardless of economic importance.

SITE INDEX AND PRODUCTIVITY CLASS - These are discussed under ordination class symbol.

TREES TO PLANT - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

This subsection includes:

- **(a) Forest Management (one or two tables)**

Table 7.--Forest Productivity

(Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available.)

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site	Volume	
		index	of wood fiber	
			cu ft/ac	
70030:				
Noark-----	black oak-----	65	43	black oak, northern
	eastern redcedar----	40	43	red oak, white oak
	northern red oak----	66	43	
	shortleaf pine-----	60	86	
	southern red oak----	66	43	
	white oak-----	58	43	
Clarksville-----	black oak-----	62	43	black oak, northern
	northern red oak----	61	43	red oak, shortleaf
	shortleaf pine-----	61	86	pine, white oak
	white oak-----	55	43	
70031:				
Hailey-----	black oak-----	---	---	black oak, northern
	hickory-----	---	---	red oak, shortleaf
	northern red oak----	65	43	pine, white oak
	post oak-----	---	---	
	white oak-----	62	43	
Rueter-----	black oak-----	61	43	black oak,
	northern red oak----	61	43	shortleaf pine,
	white oak-----	58	43	white oak
70032:				
Tonti-----	black oak-----	60	43	black oak,
	post oak-----	45	29	shortleaf pine
	shortleaf pine-----	54	86	
70033:				
Moko-----	eastern redcedar----	30	29	eastern redcedar
Rock outcrop.				
70034:				
Moko-----	eastern redcedar----	30	29	eastern redcedar
Blueye-----	blackjack oak-----	---	---	eastern redcedar
	eastern redcedar----	35	29	
	post oak-----	---	---	
Rock outcrop.				
70035, 70036:				
Sonsac-----	black oak-----	54	43	black oak, eastern
	post oak-----	45	29	redcedar,
	white oak-----	42	29	shortleaf pine
Gobbler-----	black oak-----	58	43	black oak,
	northern red oak----	---	---	shortleaf pine
	white oak-----	57	43	
70037:				
Sonsac-----	black oak-----	54	43	black oak, eastern
	post oak-----	45	29	redcedar,
	white oak-----	42	29	shortleaf pine

Table 7.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site	Volume	
		index	of wood fiber	
			cu ft/ac	
70037:				
Rueter-----	black oak-----	74	57	black oak, white
	northern red oak----	---	---	oak
	white oak-----	75	57	
70038:				
Moko-----	eastern redcedar----	30	29	eastern redcedar
Rock outcrop.				
70050:				
Rueter-----	black oak-----	74	57	black oak, white
	northern red oak----	---	---	oak
	post oak-----	---	---	
	white oak-----	75	57	
Goss-----	black oak-----	57	43	black oak,
	blackjack oak-----	---	---	shortleaf pine,
	post oak-----	50	43	white oak
	shortleaf pine-----	57	86	
	white oak-----	55	43	
70051:				
Hailey-----	black oak-----	---	---	black oak, northern
	hickory-----	---	---	red oak, shortleaf
	northern red oak----	65	43	pine, white oak
	white oak-----	62	43	
Rueter-----	black oak-----	74	56	black oak, white
	northern red oak----	---	---	oak
	white oak-----	75	56	
71252:				
Britwater-----	eastern redcedar----	64	57	northern red oak,
	northern red oak----	70	57	shortleaf pine,
	shortleaf pine-----	70	114	white oak
73070:				
Sowcoon-----	black oak-----	65	43	black oak, northern
	northern red oak----	70	57	red oak, shortleaf
	shortleaf pine-----	---	---	pine
	white oak-----	66	43	
73113:				
Scholten-----	black oak-----	45	29	black oak, eastern
	hickory-----	---	---	redcedar,
	post oak-----	45	29	shortleaf pine
73114:				
Captina-----	black oak-----	59	43	black oak,
	blackjack oak-----	---	---	shortleaf pine
	post oak-----	51	43	
	shortleaf pine-----	60	86	
73115:				
Horneybuck-----	black oak-----	57	43	black oak,
	post oak-----	---	---	shortleaf pine,
	white oak-----	55	43	white oak
Tonti-----	black oak-----	60	43	black oak,
	post oak-----	45	29	shortleaf pine
	shortleaf pine-----	54	86	

Table 7.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
73116:				
Pomme-----	northern red oak----	65	43	black walnut,
	white oak-----	65	43	shortleaf pine,
				white oak
73117:				
Clarksville-----	black oak-----	62	43	black oak, northern
	northern red oak----	61	43	red oak, shortleaf
	shortleaf pine-----	61	86	pine, white oak
	white oak-----	55	43	
Scholten-----	black oak-----	45	29	black oak,
	hickory-----	---	---	shortleaf pine,
	post oak-----	45	29	white oak
Hailey-----	black oak-----	---	---	black oak, northern
	hickory-----	---	---	red oak, shortleaf
	northern red oak----	65	43	pine, white oak
	post oak-----	---	---	
	white oak-----	62	43	
73118:				
Rueter-----	black oak-----	74	56	black oak, white
	post oak-----	---	---	oak
	white oak-----	75	56	
Goss-----	black oak-----	57	43	black oak,
	blackjack oak-----	---	---	shortleaf pine,
	post oak-----	50	43	white oak
	shortleaf pine-----	57	86	
	white oak-----	55	43	
73119:				
Rueter-----	black oak-----	74	56	black oak, white
	post oak-----	---	---	oak
	white oak-----	75	56	
Hailey-----	black oak-----	---	---	black oak, northern
	hickory-----	---	---	red oak, shortleaf
	northern red oak----	65	43	pine, white oak
	post oak-----	---	---	
	white oak-----	62	43	
73120:				
Rueter-----	black oak-----	74	57	black oak, white
	northern red oak----	---	---	oak
	post oak-----	---	---	
	white oak-----	75	57	
Gasconade-----	blackjack oak-----	---	---	eastern redcedar
	chinkapin oak-----	41	29	
	eastern redcedar-----	29	29	
	post oak-----	---	---	
Rock outcrop.				
73121:				
Scholten-----	black oak-----	45	29	black oak,
	hickory-----	---	---	shortleaf pine,
	post oak-----	45	29	white oak

Table 7.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site	Volume	
		index	of wood fiber	
			cu ft/ac	
73121: Tonti-----	black oak-----	60	43	black oak, post oak-----
	shortleaf pine-----	45	29	shortleaf pine
		54	86	
73122: Gasconade-----	blackjack oak-----	---	---	eastern redcedar
	chinkapin oak-----	41	29	
	eastern redcedar-----	29	29	
	post oak-----	---	---	
Rock outcrop.				
73123: Mano-----	black oak-----	69	43	black oak, northern
	northern red oak-----	---	---	red oak, white oak
	white oak-----	66	43	
Ocie-----	black oak-----	60	43	black oak, northern red oak-----
	white oak-----	55	43	shortleaf pine
		57	43	
73124: Alred-----	black oak-----	69	43	black oak, shortleaf pine-----
	white oak-----	65	86	shortleaf pine, white oak-----
		60	29	white oak
Ocie-----	black oak-----	60	43	black oak, northern red oak-----
	white oak-----	55	43	shortleaf pine
		57	43	
73127: Gobbler-----	black oak-----	58	43	black oak, northern red oak-----
	white oak-----	---	---	shortleaf pine
		57	43	
Sonsac-----	black oak-----	54	29	black oak, eastern eastern redcedar-----
	post oak-----	40	43	redcedar, white oak-----
		45	29	shortleaf pine
		42	29	
73128: Gobbler-----	black oak-----	54	29	black oak, eastern northern red oak-----
	white oak-----	---	---	redcedar, red oak, shortleaf pine
		57	43	
Sonsac-----	black oak-----	54	29	black oak, eastern eastern redcedar-----
	post oak-----	40	43	redcedar, white oak-----
		45	29	shortleaf pine
		42	29	
73129, 73130, 73131, 73132: Gasconade-----	blackjack oak-----	---	---	eastern redcedar
	chinkapin oak-----	41	29	
	eastern redcedar-----	29	29	
	post oak-----	---	---	

Table 7.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume	
			of wood fiber cu ft/ac	
73133:				
Alred-----	black oak-----	69	43	black oak,
	shortleaf pine-----	65	86	shortleaf pine,
	white oak-----	60	43	white oak
Ocie-----	black oak-----	60	43	---
	northern red oak----	55	43	
	white oak-----	57	43	
73134:				
Alred-----	northern red oak----	65	43	northern red oak,
	shortleaf pine-----	65	86	shortleaf pine,
	white oak-----	60	43	white oak
Ocie-----	black oak-----	60	43	black oak,
	northern red oak----	55	43	shortleaf pine
	white oak-----	57	43	
Sonsac-----	black oak-----	54	43	black oak, eastern
	post oak-----	45	29	redcedar,
	white oak-----	42	29	shortleaf pine
74638, 74639:				
Waben-----	black oak-----	71	57	black oak, northern
	northern red oak----	66	57	red oak, shortleaf
	shortleaf pine-----	70	114	pine, white oak
	white oak-----	66	43	
74640:				
Hootentown-----	American sycamore----	---	---	black walnut,
	black walnut-----	---	---	northern red oak,
	common hackberry----	---	---	white ash, white
	green ash-----	70	57	oak
	red maple-----	---	---	
	white oak-----	---	---	
75401:				
Horsecreek-----	American elm-----	---	---	black walnut,
	American sycamore----	---	---	eastern
	Shumard's oak-----	70	57	cottonwood, white
	black walnut-----	---	---	ash
	common hackberry----	---	---	
	green ash-----	---	---	
	pin oak-----	70	57	
	red maple-----	---	---	
Jamesfin-----	American sycamore----	---	---	black walnut, green
	black walnut-----	---	---	ash, pecan
	cottonwood-----	---	---	
	green ash-----	85	57	
	pecan-----	---	---	
	river birch-----	---	---	
75402:				
Pinerun-----	American sycamore----	---	---	black oak, black
	black oak-----	60	43	walnut, green ash,
	black walnut-----	---	---	northern red oak
	green ash-----	---	---	

Table 7.--Forest Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site	Volume	
		index	of wood fiber	
			cu ft/ac	
75403:				
Cedargap-----	American sycamore---	---	---	black oak,
	black oak-----	66	43	shortleaf pine
	chinkapin oak-----	---	---	
	northern red oak----	58	43	
Woolly-----	American sycamore---	---	0	American sycamore,
	black oak-----	---	0	black walnut,
	black walnut-----	---	0	shortleaf pine
	white oak-----	60	43	
75404:				
Pinerun-----	American sycamore---	90	114	black oak, black
	black oak-----	60	43	walnut, green ash,
	black walnut-----	---	---	northern red oak
	green ash-----	---	---	
75405:				
Pinerun-----	American sycamore---	90	114	black oak, black
	black oak-----	60	43	walnut, green ash,
	black walnut-----	---	---	northern red oak
	green ash-----	---	---	
Waben-----	black oak-----	71	57	black oak, black
	northern red oak----	66	57	walnut, northern
	shortleaf pine-----	70	114	red oak, shortleaf
	white oak-----	66	57	pine, white oak